

## PROJECT DESCRIPTION

This project involves the reconstruction of an existing signal to provide for additional through and left turn lanes along US Route 1 (Baltimore Avenue), a new median along US Route 1, and the addition of IKEA Centre Blvd. to the north side of the intersection. The existing signal pole on the north-west side of the intersection will be removed and new signal poles and mast arms will be installed at all four corners of the intersection. Detection cameras will be installed for the left turn lanes along US 1 and all of the "at signal" lanes for the minor roads. Micro-probes will be used for the advanced detection along US Route 1.

## II. INTERSECTION OPERATION

1. The intersection is to operate in a NEMA 8-phase, semi-actuated mode, with the East-West approaches running separately.

### III. CONTROLLER REQUIREMENT

1. Install a fully-actuated, eight phase controller with two (2) four channel, time-delay-output loop detector amplifiers, and associated harnesses housed in a NEMA size "6" base mounted cabinet.

## PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

MR. CHARLIE WATKINS  
DISTRICT ENGINEER  
(301) 513-7311

MR. DENNIS McMAHON  
ADE CONSTRUCTION  
(301) 513-7345

MR. RICHARD DAFF  
DIVISION CHIEF, TDD  
(410) 787-7630

MR. MAJID SHAKIB  
ADE TRAFFIC  
(301) 513-7358

MR. BARRY KING  
CHIEF, TEDD  
(410) 787-4011

MR. EDWARD RODENHIZER  
CHIEF OF SIGNAL OPERATIONS  
(410) 787-7652

## EQUIPMENT LIST A

A. THE CONTRACTOR SHALL FURNISH THE INTERFACE EQUIPMENT FOR THE CAMERAS AND SHA SHALL INSTALL THE INTERFACE EQUIPMENT FOR THE CAMERAS.

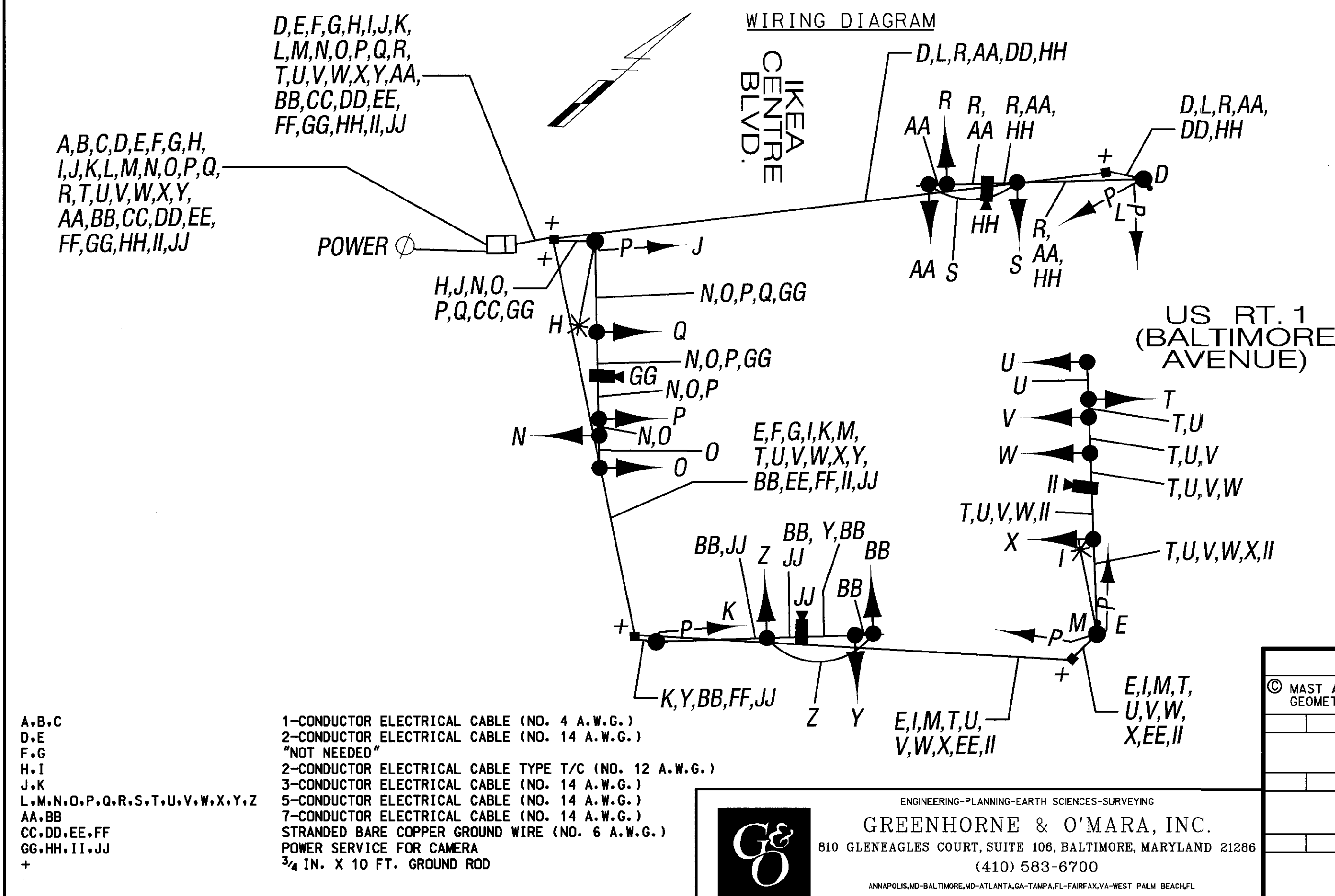
## EQUIPMENT LIST B

**B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY CONTRACTOR.**

| QUANTITY | DESCRIPTION  |
|----------|--|
| LS       | MAINTENANCE OF TRAFFIC   |
| 3 CY     | TEST PIT EXCAVATION  |
| 20 CY    | FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION   |
| 8 EACH   | FURNISH AND INSTALL 12 IN., ONE-WAY, THREE SECTION (R,Y,G) BLACK-FACED TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING.  |
| 3 EACH   | FURNISH AND INSTALL 12 IN., ONE-WAY, THREE SECTION (RA,YA,GA) BLACK-FACED TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING.   |
| 2 EACH   | FURNISH AND INSTALL 12 IN., ONE-WAY, FOUR SECTION (R,Y,G,GA) BLACK-FACED TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING.  |
| 1 EACH   | FURNISH AND INSTALL 12 IN., ONE-WAY, FIVE SECTION (R,Y,G,YA,GA) BLACK-FACED TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING.   |
| 6 EACH   | FURNISH AND INSTALL 12 IN., ONE-WAY, TWO SECTION (WALK, DON'T WALK) PEDESTRIAN SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM POLE MOUNTING AND CUTAWAY VISORS.  |
| 2 EACH   | FURNISH AND INSTALL PEDESTRIAN PUSHBUTTON AND R10-4(2) SIGN - "PUSHBUTTON TO CROSS BALTIMORE AVE."   |
| 115 SF   | FURNISH AND INSTALL SHEET ALUMINUM SIGNS <ul style="list-style-type: none"> <li>- 2 EACH D6-1 SIGN (24" X 51") - MAST ARM MOUNT</li> <li>- 6 EACH R3-5L SIGN (30" X 36") - MAST ARM MOUNT</li> <li>- 1 EACH R3-5R SIGN (30" X 36") - MAST ARM MOUNT</li> <li>- 3 EACH D3-2 SIGN (VAR. X 16") - MAST ARM MOUNT</li> <li>- 1 EACH R10-12 (24" X 30") - MAST ARM MOUNT</li> </ul> |
| 5 EACH   | FURNISH AND INSTALL 3/4 IN. X 10 FT. GROUND ROD  |
| 1 EACH   | FURNISH AND INSTALL MAST ARM POLE AND 60 FT. MAST ARM  |
| 3 EACH   | FURNISH AND INSTALL MAST ARM POLE AND 50 FT. MAST ARM  |
| 2 EACH   | FURNISH AND INSTALL 20 FT. LIGHTING ARM FOR TRAFFIC SIGNAL STRUCTURE   |
| 2 EACH   | FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL  |
| 440 LF   | FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR (NO. 14 AWG)  |
| 390 LF   | FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR TYPE T/C (NO. 12 AWG)   |
| 30 LF    | FURNISH AND INSTALL ELECTRICAL CABLE-1 CONDUCTOR (NO. 14 AWG)  |
| 2 EACH   | FURNISH AND INSTALL FOUR-CHANNEL, LOOP DETECTOR AMPLIFIER  |

### PHASING SEQUENCE CHART

EXISTING TO REMAIN



## EQUIPMENT LIST B CONTINUED

**B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY CONTRACTOR.**


| <u>QUANTITY</u> | <u>DESCRIPTION</u>   |
|-----------------|--|
| 20 LF           | FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED) |
| 380 LF          | FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT (SLOTTED)  |
| 220 LF          | FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED) |
| 6 EACH          | FURNISH AND INSTALL ELECTRICAL HANDHOLE                            |
| LS              | REMOVE AND DISPOSE OF EXISTING MATERIALS                           |
| 460 LF          | FURNISH AND INSTALL ELECTRICAL CABLE-7 CONDUCTOR (NO. 14 AWG)      |
| 2900 LF         | FURNISH AND INSTALL ELECTRICAL CABLE-5 CONDUCTOR (NO.14 AWG)       |
| 580 LF          | FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)   |
| 4 EACH          | FURNISH AND INSTALL CAMERA ASSEMBLY                                |
| 190 LF          | FURNISH AND INSTALL ELECTRICAL CABLE-3 CONDUCTOR (NO. 14 AWG)      |

## EQUIPMENT LIST C

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

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 MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
Traffic Signal Plan (MOT Phases 1A & 1B)  
US RT. 1 (BALTIMORE AVENUE) & IKEA CENTRE BLVD

DRAWN BY: JEDNORSKI/STRAIN  
CHECKED BY: M. RUCKER  
SCALE: 1" = 20'  
DATE: AUGUST 3, 2000

F.A.P. NO. \_\_\_\_\_  
S.H.A. NO. 2385472502810  
COUNTY: PRINCE GEORGE'S  
LOG MILE: 160001 B6.68

|                                    |           |
|------------------------------------|-----------|
| TS NO.<br>3657 <b>C-61</b>         | SHEET NO. |
| T.I.M.S. NO.<br><b>F241</b> 10-800 | 8 OF 22   |